

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1. (Currently Amended) A method for increasing net growth in a plant or seed, the method comprising applying an agent to the plant or seed in an amount effective for increasing net growth in the plant, wherein the agent comprises ~~is~~ isolated lumichrome ~~or a microorganism engineered to recombinantly express lumichrome.~~
2. (Original) The method of claim 1, comprising applying the agent to a root, a shoot, a leaf, or a seed of the plant.
- 3-13. (Canceled)
14. (Original) The method of claim 1, wherein said agent has a lumichrome concentration of about 3 nM to about 50 nM.
15. (Original) The method of claim 1, comprising applying said agent to said plant in multiple applications.
16. (Original) The method of claim 15, comprising applying to said agent to said plant about every 24 to 48 hours.
17. (Original) The method of claim 1, wherein said plant is an angiosperm.
18. (Original) The method of claim 17, wherein said angiosperm selected from the group consisting of monocotyledonous plants and dicotyledonous plants.
19. (Original) The method of claim 18, wherein said dicotyledonous plant is a legume.
20. (Original) The method of claim 19, wherein said legume is alfalfa.

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PATENT

21-75. (Canceled)